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Zhang, Honglai
Bi, Anding

<120> A NOVEL HUMAN LYSOZYME GENE, ITS ENCODED POLYPEPTIDE AND THE METHOD FOR PREPARING THEM

<130> A34054-PCT-USA 072975.0110

<140> 09/786,024
<141> 1999-08-30

<150> CN 98111041.X
<151> 1998-08-31

<160> 12

<170> FastSEQ for Windows Version 4.0

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<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 1
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23

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<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 2
tgctgtgcatt ggttccgtcc atc

23

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<211> 544
<212> DNA
<213> Human

<220>
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<222> (81)...(521)
<223> Lysozyme LYCH3

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cggtgggcc agctgggatc atg ttg ttg gcc ctg gtc tgt ctg ctc agc tgc 113
 Met Leu Leu Ala Leu Val Cys Leu Leu Ser Cys
 1 5 10

ctg cta ccc tcc agt gag gcc aag ctc tac ggt cgt tgt gaa ctg gcc 161
 Leu Leu Pro Ser Ser Glu Ala Lys Leu Tyr Gly Arg Cys Glu Leu Ala
 15 20 25

aga gtg cta cat gac ttc ggg ctg gac gga tac cgg gga tac agc ctg 209
 Arg Val Leu His Asp Phe Gly Leu Asp Gly Tyr Arg Gly Tyr Ser Leu
 30 35 40

gct gac tgg gtc tgc ctt gct tat ttc aca agc ggt ttc aac gca gct 257
 Ala Asp Trp Val Cys Leu Ala Tyr Phe Thr Ser Gly Phe Asn Ala Ala
 45 50 55

gct ttg gac tac gag gct gat ggg agc acc aac aac ggg atc ttc cag 305
 Ala Leu Asp Tyr Glu Ala Asp Gly Ser Thr Asn Asn Gly Ile Phe Gln
 60 65 70 75

atc aac agc cgg agg tgg tgc agc aac ctc acc ccg aac gtc ccc aac 353
 Ile Asn Ser Arg Arg Trp Cys Ser Asn Leu Thr Pro Asn Val Pro Asn
 80 85 90

gtg tgc cgg atg tac tgc tca gat ttg ttg aat cct aat ctc aag gat 401
 Val Cys Arg Met Tyr Cys Ser Asp Leu Leu Asn Pro Asn Leu Lys Asp
 95 100 105

acc gtt atc tgt gcc atg aag ata acc caa gag cct cag ggt ctg ggt 449
 Thr Val Ile Cys Ala Met Lys Ile Thr Gln Glu Pro Gln Gly Leu Gly
 110 115 120

tac tgg gag gcc tgg agg cat cac tgc cag gga aaa gac ctc act gaa 497
 Tyr Trp Glu Ala Trp Arg His His Cys Gln Gly Lys Asp Leu Thr Glu
 125 130 135

tgg gtg gat ggc tgt gac ttc tag gatggacgga accatgcaca gca 544
 Trp Val Asp Gly Cys Asp Phe *

<210> 4
 <211> 146
 <212> PRT
 <213> Human

<400> 4
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 1 5 10 15
 Glu Ala Lys Leu Tyr Gly Arg Cys Glu Leu Ala Arg Val Leu His Asp
 20 25 30
 Phe Gly Leu Asp Gly Tyr Arg Gly Tyr Ser Leu Ala Asp Trp Val Cys
 35 40 45
 Leu Ala Tyr Phe Thr Ser Gly Phe Asn Ala Ala Leu Asp Tyr Glu
 50 55 60
 Ala Asp Gly Ser Thr Asn Asn Gly Ile Phe Gln Ile Asn Ser Arg Arg
 65 70 75 80

Trp Cys Ser Asn Leu Thr Pro Asn Val Pro Asn Val Cys Arg Met Tyr
85 90 95
Cys Ser Asp Leu Leu Asn Pro Asn Leu Lys Asp Thr Val Ile Cys Ala
100 105 110
Met Lys Ile Thr Gln Glu Pro Gln Gly Leu Gly Tyr Trp Glu Ala Trp
115 120 125
Arg His His Cys Gln Gly Lys Asp Leu Thr Glu Trp Val Asp Gly Cys
130 135 140
Asp Phe
145

<210> 5
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

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<210> 6
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 6
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<210> 7
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 7
tctcaagttt atgttgg ccctggct 29

<210> 8
<211> 29
<212> DNA
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<220>
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<400> 8
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<210> 9

<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide primer

<400> 9
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<210> 10
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Signature sequence of lysozyme and
alpha-lactoalbumin

<221> VARIANT
<222> (2)...(4)
<223> Any amino acid

<221> VARIANT
<222> (6)...(7)
<223> Any amino acid

can't find
<221> VARIANT
<222> (8)...(8)
<223> Leucine, methionine or phenylalanine

can't find
<221> VARIANT
<222> (9)...(11)
<223> Any amino acid

<221> VARIANT
<222> (12)...(12)
<223> Aspartate, glutamate or asparagine

<221> VARIANT
<222> (13)...(13)
<223> Leucine or isoleucine

<221> VARIANT
<222> (14)...(18)
<223> Any amino acid

<400> 10
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Xaa Xaa Cys

<210> 11
<211> 148
<212> PRT

<213> Trachypithecus francoisi

<400> 11
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Gln Gly Lys Ile Phe Glu Arg Cys Glu Leu Ala Arg Thr Leu Lys Lys
20 25 30
Leu Gly Leu Asp Gly Tyr Lys Gly Val Ser Leu Ala Asn Trp Val Cys
35 40 45
Leu Ala Lys Trp Glu Ser Gly Tyr Asn Thr Glu Ala Thr Asn Tyr Asn
50 55 60
Pro Gly Asp Glu Ser Thr Asp Tyr Gly Ile Phe Gln Ile Asn Ser Arg
65 70 75 80
Tyr Trp Cys Asn Asn Gly Lys Thr Pro Gly Ala Val Asp Ala Cys His
85 90 95
Ile Ser Cys Ser Ala Leu Leu Gln Asn Asn Ile Ala Asp Ala Val Ala
100 105 110
Cys Ala Lys Arg Val Val Ser Asp Pro Gln Gly Ile Arg Ala Trp Val
115 120 125
Ala Trp Arg Asn His Cys Gln Asn Lys Asp Val Ser Gln Tyr Val Lys
130 135 140
Gly Cys Gly Val
145

<210> 12

<211> 147

<212> PRT

<213> Ring-necked pheasant

<400> 12
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Pro Gly Lys Val Tyr Gly Arg Cys Glu Leu Ala Ala Ala Met Lys Arg
20 25 30
Met Gly Leu Asp Asn Tyr Arg Gly Tyr Ser Leu Gly Asn Trp Val Cys
35 40 45
Ala Ala Lys Phe Glu Ser Asn Phe Asn Thr Gly Ala Thr Asn Arg Asn
50 55 60
Thr Asp Gly Ser Thr Asp Tyr Gly Ile Leu Gln Ile Asn Ser Arg Trp
65 70 75 80
Trp Cys Asn Asp Gly Arg Thr Pro Gly Ser Lys Asn Leu Cys His Ile
85 90 95
Pro Cys Ser Ala Leu Leu Ser Ser Asp Ile Thr Ala Ser Val Asn Cys
100 105 110
Ala Lys Lys Ile Val Ser Asp Gly Asn Gly Met Asn Ala Trp Val Ala
115 120 125
Trp Arg Lys His Cys Lys Gly Thr Asp Val Asn Val Trp Ile Arg Gly
130 135 140
Cys Arg Leu
145